

**ARCHAEOLOGY SURVEY REPORT  
FOR THE SWEETWATER LOOP TRAIL PROJECT (UH3106)**

**July 2005**

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## **I. Management Summary**

A cultural evaluation has been conducted in accordance with the California Environmental Quality Act (CEQA) guidelines. The proposed Loop Trail project involves the construction of the northern portion of the Sweetwater Reservoir Loop Trail. The project will connect to the existing southern section with seven proposed segments, one bridge crossing, and two staging areas. As proposed the project would not result in significant impacts to prehistoric archaeological sites along the proposed alignment.

This report presents the results of a surface survey conducted at the site of the proposed northern trail segments. Initially, an Institutional record search was conducted to identify any previously recorded sites in the area. Based on the record search it was determined that the project area had previously been surveyed and nine prehistoric sites were discovered. The majority of the previous sites consisted of low-density lithic scatters. However two sites contained stacked rock enclosures. Glenn Russell, Donna Beddow, and Esther Cornfeld conducted pedestrian surveys, which consisted of intensive searches throughout the trail-impacted area. Surveyors walked in 10-meter intervals back and forth over the locations of the known sites looking for artifacts. An additional 20 meters from the proposed trail tread was also included in the survey. No subsurface samples were taken.

All previous site locations were revisited and reevaluated. No artifacts or evidence of prehistoric activities were found at two sites. For the seven remaining sites, very few if any artifacts were located onsite during the current survey. None of the sites were determined to be eligible for listing on the California Register of Historical Resources therefore the sites were determined not to be significant pursuant to the California Environmental Quality Act (CEQA). In addition, the trail project will have little if any impact to the sites regardless of their significance. In addition, no sites from the historic period exist within the trail impact area.

One new site was located, Sweetwater Loop Trail #1 (SWLT1) during the survey. The site consisted of lithic scatter and was probably a minor quarry location for metavolcanic cobbles. Although several pieces of debitage were present, it was determined that the site is not eligible for listing on the California Register of Historical Resources and construction of the trail will have no impact to the site. Therefore, no additional work is required.

## **II. Description of Undertaking**

The County of San Diego, Department of Parks and Recreation proposes to construct the northern portion of the Sweetwater Reservoir Loop Trail. The proposed project will connect to the existing southern portion and will allow non-motorized, recreational opportunities completely around the Sweetwater

Reservoir. The completion of the 14.1-mile loop trail will require the establishment of the trail along the north side of the reservoir. The northern trail alignment will utilize existing trail, paths, and disturbed areas to the maximum extent practicable. Minor improvements along the northern trail are necessary in certain locations to maintain a safe passage. Improvements include minor grading along the trail to direct drainage away from the Sweetwater Reservoir and into the Urban Runoff Detention Systems, the removal of boulders, and the placement of crushed rock or small footbridges.

The proposed northern trail can be divided into seven segments and two trail staging areas (Figure 3). Staging Area 1 is an existing staging area and can be accessed at the end of the existing Red Hill Trail within the limits of the County's Summit Park. The Staging Area 1 will serve as a trailhead and/or rest area providing hikers and equestrian riders access to both the northern and southern trail systems, as well as providing users with parking, bathroom and drinking water facilities, equestrian hitching posts, and benches. The northern portion then heads north and northeast past the Bonita Golf Course, and the Sweetwater Dam then progresses east along the upper reaches of the Sweetwater Reservoir ending at proposed Pointe Development Segment 9. The County will construct one river crossing within proposed Segment 3 across Spring Valley Creek. Caltrans will be responsible for constructing segment 2 of the northern trail system along Quarry Road.

The project is located in the southeastern portion of San Diego County within the 7.5" USGS Quadrangle National City Township 17S, Range 1W and Quadrangle Jamul Mountain Township 17S, Range 1W (Figure 1 and 2). The project limits are from the beginning of Segment 1 to the end of Segment 8 for a total of approximately 23,375 linear feet (4.42 miles). The width of the trail tread shall vary between 8 and 10 feet with a minimum of 4 feet in the more environmentally sensitive areas. The trail location is already identified and impacts are restricted to the 10-foot wide trail tread.

## **II. Setting**

### **1. Environmental Setting**

The loop trail is located within the coastal plain of the Peninsular Ranges geomorphic province of Southern California. The geology surrounding the project site has been previously described as being comprised of two geologic formations, the (1) Eocene Sweetwater Formation of mudstones and grey alluvial clays underlay, and (2) Pleistocene terrace deposits. The soils in the project area classified as Olivenhain Cobbly Loam, Diablo Clay, Huerhuero-urban land complex, San Miguel Rocky Silt Loams, and, Riverwash.

Large cobbles, which appear to be floating material, are located over much of the surface. The cobbles have been transported to the area from San Miguel

Mountain and Dictionary Hill by alluvial action. These cobbles area metavolcanic and appear to be the focus of activities occurring at the sites that have been located in the project area. Most of these sites are minor quarry locations characterized by cobbles, broken cobbles, and debitage resulting from initial stages of the reduction of cobbles for the manufacture of slate stone tools. No indication of bifacial reduction was located any of the sties.

The area surrounding the loop trail is semi-rural and small rural community near urban and/or developed areas to the north and open space/parks to the south. The loop trail transverses a variety of vegetation communities. Vegetation types include Diegan coastal sage scrub, non-native grasslands, and freshwater marsh. These areas contain sensitive plant and animal species. Existing disturbed areas will be utilized to the maximum extent feasible.

## 2. Prehistoric Cultural Setting

San Diego County has a very rich and extensive record of prehistoric activity. The archaeological time periods include the Paleo-Indian San Dieguito Complex, the Archaic La Jolla Complex, and the Late Prehistoric (Kumeyaay) Periods.

### *The San Dieguito Complex/Paleo-Indian*

The earliest prehistoric sites in San Diego County are identified as belonging to the San Dieguito Complex. Initially believed to have been big game hunters, the San Dieguito are better characterized as wide-ranging hunter-gatherers. These people abandoned the drying inland lakes of the present California desert and arrived in San Diego County circa 9,000 years before present (BP) as documented at the Harris Site CA-SDI-149 (Warren 1966). Diagnostic artifacts include finely crafted scraper planes, choppers, scrapers, crescentics, elongated bifacial knives, and intricate leaf-shaped points (Rogers 1939, Warren 1967).

### *Archaic Period (La Jolla Complex)*

Approximately 8,000 BP, the archaic period was established. This period is characterized by coastal settlement of the La Jolla Complex. The La Jolla cultural assemblage is best recognized for its pattern of large coastal sites, shell middens, grinding tools closely associated with the marine resources of the area, cobble-based tools, and flexed human burials (Shumway, Hubbs, and Moriarty 1961; Smith and Moriarty 1985).

By 3,000 BP many of the coastal sites were abandoned. The diminishing of marine resources may have caused a shift in subsistence and settlement patterns to include a focus on terrestrial inland areas. Inland La Jolla sites have been reported in transverse valleys and sheltered canyons and have been termed "Pauma Complex" (True 1958; Warren et al. 1961; Meighan 1954). These sites are characterized by scrapers, crescents, grinding implements of manos and metates, core and cobble hammers, discoidals, stone balls, small quantities of oval and leaf-shaped blades, and small quantities of side-notched,

and concave base triangular points (True 1958; Warren et al. 1961; Meighan 1954). As the coastal region underwent an environmental change, the population of this early period showed their resiliency and their ability to adapt to new surroundings.

#### *Late Prehistoric Period*

The Late Prehistoric Period was established approximately 1,500 BP, with the introduction of ceramics, the use of bow and arrows and cremations. Subsistence patterns were reliant on seasonality of seeds, and particularly acorns, which increased milling technology to include mortars and pestles. Although, these cultural traits have been attributed to the migration of two separate linguistic groups, Yuman-speaking people of the Hokan family, and a group of Cupan speaking people it is also possible that exchange and intermarriage of local groups with groups to the east may have been responsible for the traits.

### **VII. Research Design**

No formal research design was prepared for this project. The initial phase of the investigation was designed to identify archaeological sites, evaluate their significance, and potential impacts from the proposed project. Because no sites were identified and significant impacts were not identified no additional investigations are necessary and no research design for mitigation needs to be created.

### **VIII. Methods**

Information on archaeological or historical sites previously recorded within or near the project area was obtained from an institutional record search conducted at the South Coast Information Center of the California Historic Resources Files System, located at San Diego State University. These sites are shown in Figure 4 (located in the confidential appendix) in relation to the project site. All of these sites are prehistoric low density lithic scatters and no sites from the historic period were recorded within the project footprint.

With the use of an aerial photo and GIS map the entire project site including all known sites were resurveyed. General pedestrian surveys were conducted on November 18, 2004 and January 6, 2005 along the entire designated trail tread by Glenn Russell, Donna Beddow, and Esther Cornfeld. Surface surveys were conducted along the proposed northern segment to locate previously recorded sites and to identify new unrecorded sites.

Intensive searches were conducted throughout the entire trail impact area. Surveyors walked in 10-meter intervals back and forth over the locations of the known sites looking for artifacts. Ground visibility was good in most areas as vegetation was sparse in the proposed trail location. Update site forms were

completed and photographs were taken. Any artifacts that were located were documented and GPS coordinates were obtained. No excavations or surface collections were made.

## **IX. Report of Findings**

### *CA SDi-4769*

CA SDi-4769 was originally recorded in 1974 by Tim Gross. Very low-density lithic scatter was observed on site. Previous surface collections were made. The site was relocated and the area of the site that will be crossed by the proposed trail was intensively surveyed. An additional 20 meters from the proposed trail tread was also included in the survey. This area has been previously disturbed, grubbed, and graded. Very limited evidence of the site was found. Only two isolated metavolcanic flakes were located on site. No midden soils or other indications of a subsurface component were identified.

The trail will utilize existing disturbed areas and would not require improvements in this section of the trail. Therefore, the dedication of the trail in this area would not impact the site. In addition, based on very limited artifacts present the site has been determined not be significant and no additional testing and/or excavations are required.

### *CA SDi-4771*

CA SDi-4771 was originally recorded in 1974 by Tim Gross. Very low-density surface prehistoric light flake scatter and some "massive tools" were located. The site was previously determined to be a surface site only, with no excavation potential.

The site was revisited during the pedestrian survey. There was good ground visibility in the location of the proposed trail. However, this area contained a significant amount of imported fill material. Although a few very highly scattered metavolcanic flakes were located, limited evidence of the site still exists. No evidence of midden soils or other indications of a subsurface component were identified. Very limited information if any would be obtained from conducting additional work at this site. Based on the limited amount of artifacts and the presence of no subsurface component the site has been determined not to be significant. No additional work is necessary. In addition, the trail will utilize existing disturbed areas and would not require improvements in this section of the trail. Therefore, the dedication of the trail in this area would not impact the site.

### *CA SDi-4773*

CA SDi-4773 was originally recorded in 1974 by Tim Gross. Very light scatters of flakes were observed. The previous surveyor noted that high weeds obscured the study area. The site was determined to have slight excavation potential.

The site was revisited during the pedestrian survey. No artifacts were located on site or within the vicinity of the proposed trail. In addition, no improvements are proposed for this section of the trail. This site was determined not to be significant.

*CA SDi-4645*

CA SDi-4645 was originally recorded in 1974 by Tim Gross. Flaked lithic scatter was reported. At the time of the original recordation, a surface collection was conducted. The site was revisited and updated in 1979 by M.J. Hatley. The site was described as consisting of "six distinct concentrations of flaked stone debitage associated with outcrops of irregular shaped metavolcanic nodules." The site was noted to exhibit outcropping metavolcanic rocks that were used as stone quarry material. The site was determined to be part of a quarry site located along the north shore of Sweetwater Reservoir. Data recovery excavations were conducted on this site for a residential subdivision (Hatley 1979).

The site was revisited during the pedestrian survey. Since the 1979 survey update was conducted a residential community was constructed in this area and has impacted the majority of the previously recorded site. The recent surveys of the remaining portion of the site in relation to the proposed trail identified only a very sparse lithic scatter.

The trail will utilize existing disturbed areas and would not require improvements in this section of the trail. Therefore, the dedication of the trail in this area would not impact the site. In addition, based on very limited artifacts present the site has been determined not be significant and no additional testing and/or excavations are required.

*CA SDi-4770*

CA SDi-4770 was originally recorded in 1974 by Tim Gross. It was noted that the site contained flaked artifacts scattered over the top of the knoll. It was previously concluded that this site has slight excavation potential.

The location of the site was revisited during the pedestrian survey. The site is located along Jamacha Blvd. The ground visibility in this area was fair due to a dense layer of grasses. The survey located one large primary flake.

The project will result in minimal to no site disturbance in this section of the trail. Therefore, the dedication of the trail in this area would not impact the site. In addition, based on very limited artifacts present the site has been determined not be significant and no additional testing and/or excavations are required.

*CA SDi-7978*

Diana F. Barbolla first identified CA SDi-7978 in 1980. The site was noted to contain a 10m radius of lithic scatter possibly washed down from another site. The previous survey concluded that this site contained limited research potential.



The location of the site was revisited during the pedestrian survey. This area is located adjacent to Sweetwater Boulevard and is currently highly eroded containing gravel and imported fill materials. The ground visibility was fair due to the presence of gravel and sparse vegetation patches. Based on an extensive pedestrian survey of the area, the site could not be relocated and may currently not exist.

#### *CA SDi-6843 and CA SDi-10994*

CA SDi-6843 was originally recorded in 1978 by Hightower. It was noted that the was situated on a large Basalt outcrop sitting on the end of a finger of land running southeast from Quarry Road and contained three stacked rock hunting blinds of possible prehistoric origin. The previous survey concluded that the site research potential was poor. No site forms were located for CA SDi-10994.

The location of the CA SDi-6843 was revisited during the pedestrian survey. Three stacked wall formations were observed. The site is located on top of a steep hill over 100 feet above the location of the trail that will be located along the existing Quarry Road and the San Diego County Water Authority maintenance road. No impact from construction of the trail will occur and therefore the trail placement in this area will not result in impacts to this site. In addition the location of CA SDi-10994 is also located more then 100 feet from the site of the proposed trail and no impact from construction of the trail will occur near the site. Therefore the dedication of the trail along the existing maintenance roads in this area would not impact the site.

#### *SWL1*

During the pedestrian survey of the project area, a new site was located along the proposed loop trail that was not previously recorded. A formal site number has been request from the South Coast Information Center. The site was located between SDi 4773 and SDi 4645. The site consists of large metavolcanic cobbles eroding out of the alluvium. In addition, a sparse scatter of metavolcanic debitage was found throughout the site. The site was approximately 75 meter long and 10 meters wide. No midden soil and no evidence of subsurface component were found. No collection at the site was made. The site contain very limited information and is not eligible for listing on the California Register of Historical Resources therefore determined not to be significant pursuant to the California Environmental Quality Act (CEQA). In addition, the proposed trail through this area will have minimal impacts to the site and is determined not to be significant.

## **X. Discussion**

Pedestrian surface surveys were conducted to locate previously recorded sites and to identify new unrecorded sites. Site update forms were completed for each of the located sites. Of the nine previously identified sites, scattered artifacts

were found at CA SDi 4769, CA SDi 4771, CA SDi 4645, CA SDi 6843, CA SDi 10994, and CA SDi 4770. No artifacts could be found at CA SDi 4773 and CA SDi 7978. Surveys were not conducted at CA SDi 4772 because the site is outside the project limits. If the project boundary were extended, CA SDi 4772 would be reevaluated at that time. Excavation of the nine previously recorded sites would not contribute to the understanding of local, regional, state or national history or prehistory and are therefore determined not to be significant. In addition, the proposed loop trail will establish trails along currently non-designated existing disturbed trails, paths and roadways wherever feasible and does not propose any grading activities in the location of the previously identified Archaeological sites. Therefore there will be no impacts resulting from the proposed trail improvement project.

In addition, the pedestrian surface survey did identify a new site that was not previously recorded with the South Coast Information Center. This site contained large cobbles and appears to be a small quarry site. Based on the limited number of artifacts present, this site would be not be eligible for inclusion in the California Register of Historical Resources and therefore is not significant pursuant to CEQA. The trail alignment will be placed through this area however no improvements or grading activities are necessary in this area. No additional mitigation is required.

#### **XI. Management Consideration**

It is unlikely that additional resources are present within the project's APE. No additional mitigation is required.

#### **XII. References**

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Meighan, Clement W. 1954. A Late Complex in Southern California Prehistory. In: *Southwestern Journal of Anthropology* 10:215-227.

Warren, Claude N. 1966. The San Dieguito Type Site: M.J. Rogers' 1938 Excavations on the San Dieguito River. *San Diego Museum Paper*, No. 6. San Diego, California.

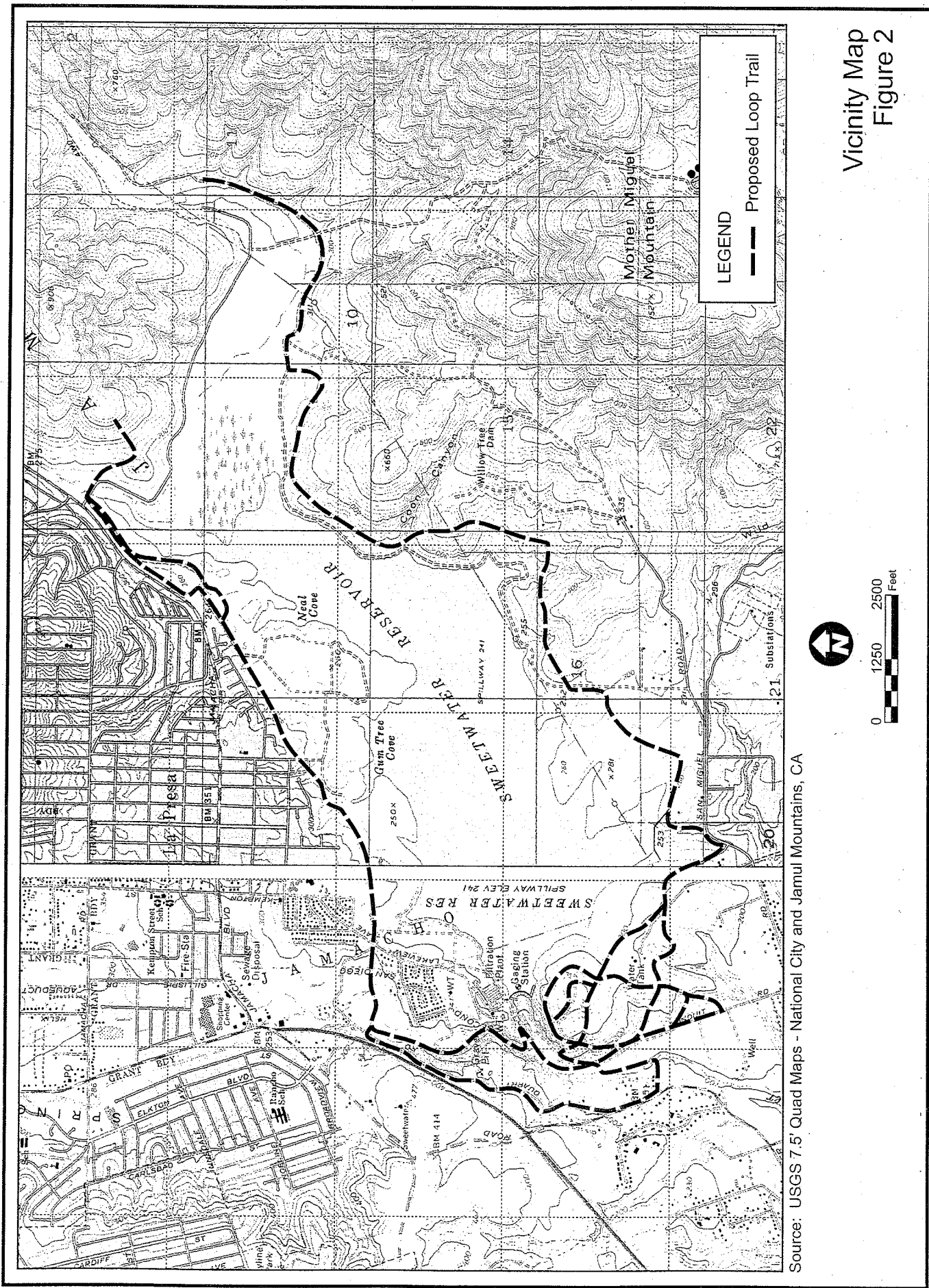
Warren, Claude. 1967. The San Dieguito Complex: A Review and Hypothesis. In: *American Antiquity*, Vol. 32, No. 2, pp. 168-185.

Warren, Claude N., D. L. True and Ardith A. Eudey. 1961 Early Gathering Complexes of Western San Diego County: Results and Interpretations of an Archaeological Survey. In: *Archaeological Survey Annual Report* 1960-1961. University of California, Los Angeles.

## **Appendix A Figures**



Regional Location Map  
Figure 1



Vicinity Map  
Figure 2

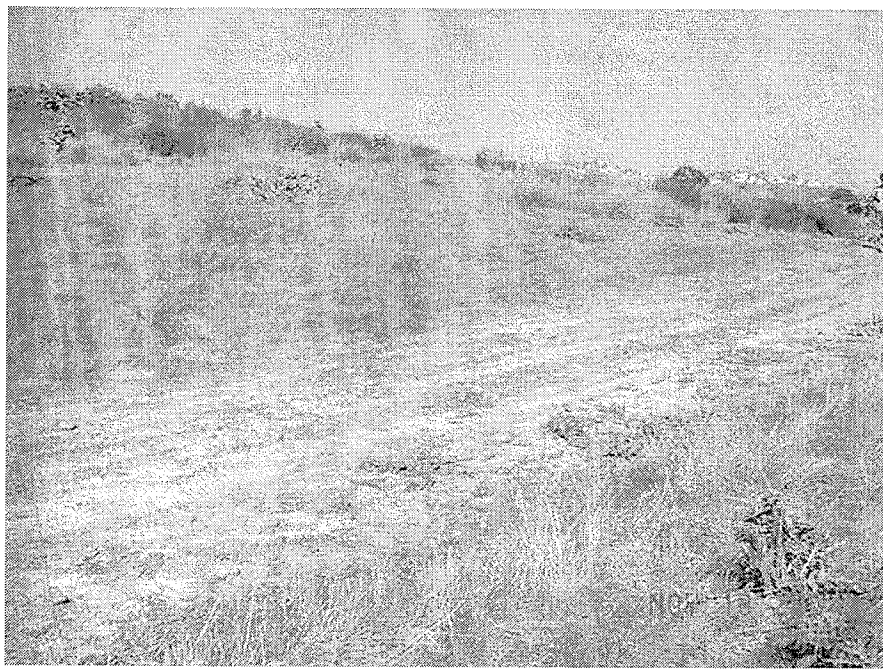
## Appendix B Site Photos

Photo1



Trail location within existing disturbed trail tread looking east

Photo 2



Trail location within existing disturbed trail tread looking north